

What is claimed is:

1. A method for determining ink jet printer parameters comprising the steps of:

5 creating a set of test sheets of printed images, printed on a known printing system and on a known substrate;
 visually inspecting the set of printed test sheets;
 identifying at least one transformation which can be applied in graduated increments, the at least one transformation having a
10 corresponding incremental visual influence on the printed images on the known substrate; and
 determining individual master transformations for each type of print in the test sheets to optimize print quality for the known substrate on the known printing system.

15 2. A method as claimed in claim 1 wherein the step of creating a set of test sheets comprises the step of creating a single test job having a plurality of individual sheets.

20 3. A method as claimed in claim 1 wherein individual color transformations of a spot or processed color system can be derived from selection of the master transformations.

25 4. A method for determining ink jet printer parameters comprising the steps of:

 creating a test pattern;
 defining an image transformation having at least one adjustment parameter which can be applied in graduated increments, the at least one adjustment parameter having a corresponding incremental visual

influence on the image;

applying the image transformation to the test pattern to
create test images, using a plurality of values of the at least one adjustment
parameter such that a plurality of test images are prepared each having distinct
5 values of the at least one adjustment parameter;

identifying the values of the at least one adjustment
parameter used to prepare each of the test images;

creating a set of test sheets of the test images, printed on a
known printing system and on a known substrate;

10 visually inspecting the set of printed test images;

identifying the test image having preferred image quality on
the known printing system and on the known substrate;

using identification means on the identified test image to
define preferred transform parameter values for the at least one adjustment
15 parameter to define a preferred transform; and

applying the preferred transform with the preferred
transform parameter values of the at least one adjustment parameter to
optimize print quality for the known substrate on the known printing system.

20 5. A method as claimed in claim 4 wherein the test pattern comprises a
plurality of printing classifications.

6. A method as claimed in claim 5 wherein the plurality of printing
classifications comprise at least a printing classification selected from the
25 group consisting of test printing, process color printing, bar code printing, and
business graphics.

7. A method as claimed in claim 4 wherein the at least one adjustment
parameter affects maximum inking level in text printing.

8. A method as claimed in claim 4 wherein the at least one adjustment parameter affects maximum inking level in graphic printing.

5 9. A method as claimed in claim 4 wherein the at least one adjustment parameter affects inking level of mid tones.

10 10. A method as claimed in claim 4 wherein the step of visually inspecting comprises the step of visually inspecting for over saturation in shadow areas of graphics.

11 11. A method as claimed in claim 4 wherein the step of visually inspecting comprises the step of visually inspecting for excessive bleed between colors on the printed test sheets.

15 12. A method as claimed in claim 4 wherein the step of visually inspecting comprises the step of visually inspecting for poor text edge definition.

20 13. A method as claimed in claim 4 wherein the step of visually inspecting comprises the step of visually inspecting for show through of the printed image to an opposite side of the substrate.

14. A method as claimed in claim 4 wherein the step of visually inspecting comprises the step of visually inspecting for cockle of the printed image.

25 15 A system for determining ink jet printer parameters comprising:
a test pattern;
an image transformation having at least one adjustment parameter which can be applied in graduated increments, the at least one adjustment parameter having a corresponding incremental visual influence on

the image;

means for applying the image transformation to the test pattern to create test images, using a plurality of values of the at least one adjustment parameter such that a plurality of test images are prepared each having distinct values of the at least one adjustment parameter;

means for identifying the values of the at least one adjustment parameter used to prepare each of the test images;

a set of test sheets of the test images, printed on a known printing system and on a known substrate;

means for visually inspecting the set of printed test images;

means for identifying the test image having preferred image quality on the known printing system and on the known substrate;

means for defining preferred transform parameter values for the at least one adjustment parameter to define a preferred transform; and

means for applying the preferred transform with the preferred transform parameter values of the at least one adjustment parameter to optimize print quality for the known substrate on the known printing system.

16. A system as claimed in claim 15 wherein the test pattern comprises a plurality of printing classifications.

17. A system as claimed in claim 16 wherein the plurality of printing classifications comprises printing selected from the group consisting of test printing, process color printing, bar code printing, and business graphics.

18. A system as claimed in claim 15 wherein the at least one adjustment parameter affects maximum inking level in text and graphic printing.

19. A system as claimed in claim 15 wherein the at least one adjustment parameter affects inking level of mid tones.

20. A system as claimed in claim 15 wherein the set of test sheets comprises a single test job having a plurality of individual sheets.

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